

Section 2-1: Real Numbers

By the end of this lesson, you should be able to answer:

- How do you graph sets of numbers on a number line?
- How do you evaluate expressions with absolute value?

Where you might see this in the real world:

- Weather, sports, population

Define the following terms:

1. Integers
2. Opposites
3. Rational number
4. Irrational number
5. Real Numbers
6. Coordinate of the point
7. Graph of the number
8. Variable
9. Absolute value
10. Opposite of the opposite

Example 1: Graph on a number line: $\left\{\frac{1}{2}, \frac{5}{6}, \frac{2}{3}, \frac{-1}{6}\right\}$.

Example 2: Use a number line to compare numbers. In each part, replace the “___” with either < or >.

a. -4 ___ 0 ___ 2

b. -1 ___ -3 ___ -6

Example 3: Graph each set of numbers on a number line.

a. The real numbers that are greater than 2 or less than -1

b. The integers that are greater than -3 and less than or equal to 2

Example 4: Evaluate each expression.

a. $|m - 4|$ when $m = -3$

b. $9 - |1 - k|$ when $k = 4$

Problem Set:

"Do the one thing you think you cannot do. Fail at it. Try again. Do better the second time. The only people who never tumble are those who never mount the high wire. This is your moment. Own it." - Oprah Winfrey